

Date: Sat, 6 Nov 93 17:33:17 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1316
To: Info-Hams

Info-Hams Digest Sat, 6 Nov 93 Volume 93 : Issue 1316

Today's Topics:

SAREX Keps & Update 10/28 (3 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 6 Nov 93 22:50:48 GMT
From: news-mail-gateway@ucsd.edu
Subject: SAREX Keps & Update 10/28
To: info-hams@ucsd.edu

R:931103/1212Z @:WA7BHH.WA.USA.NA [Tacoma] #:13575 Z:98465 FBB5.15
R:931103/1132 6215@WB7QEU.WA.USA.NA
R:931103/1016 7983@WA7SJN.WA.USA.NA
R:931103/1003 1121@W0RLI.OR.USA.NOAM
R:931103/0545 37550@N7DXT.#EUGEN.OR.USA.NA
R:931103/0454 49935@WB7VMS.#MURPH.OR.USA.NOAM

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29047 ; Wed, 03 Nov 93 01:09:32 GMT
Date: Wed, 03 Nov 93 01:09:40 UTC
Message-Id: <29041_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29041 ; Tue, 02 Nov 93 21:42:27 GMT
Date: Tue, 02 Nov 93 21:42:59 UTC
Message-Id: <28985_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28985 ; Tue, 02 Nov 93 20:47:06 GMT
Date: Tue, 02 Nov 93 20:47:48 UTC
Message-Id: <28973_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28973 ; Tue, 02 Nov 93 19:58:01 GMT
Date: Tue, 02 Nov 93 19:58:49 UTC
Message-Id: <28968_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28968 ; Tue, 02 Nov 93 18:43:20 GMT
Date: Tue, 02 Nov 93 18:44:09 UTC
Message-Id: <28942_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28942 ; Tue, 02 Nov 93 17:43:53 GMT
Date: Tue, 02 Nov 93 17:44:47 UTC
Message-Id: <28937_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28

X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28937 ; Tue, 02 Nov 93 15:43:49 GMT
Date: Tue, 02 Nov 93 15:44:50 UTC
Message-Id: <28936_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28936 ; Tue, 02 Nov 93 14:43:54 GMT
Date: Tue, 02 Nov 93 14:44:51 UTC
Message-Id: <28935_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28935 ; Tue, 02 Nov 93 13:43:53 GMT
Date: Tue, 02 Nov 93 13:44:50 UTC
Message-Id: <28933_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28933 ; Tue, 02 Nov 93 12:42:37 GMT
Date: Tue, 02 Nov 93 12:43:53 UTC
Message-Id: <28932_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28932 ; Tue, 02 Nov 93 12:09:45 GMT
X-Forwarded-To: W70EK
Date: 28 Oct 93 19:00:00 UTC
Message-Id: <931028050312@w7oek.bbs>

From: abfhhb@wa8ure.#swmi.mi.usa.na
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

R:931102/0810z 28885@W70EK.OR.USA.NA
R:931102/0121 49595@WB7VMS.#MURPH.OR.USA.NOAM
R:931101/1449 37097@N7DXT.#EUGEN.OR.USA.NA
R:931101/0530 4700@KB7DBD.OR.USA.NA
R:931101/1218 9138@KB7KBT.OR.USA.NA
R:931101/1152 6500@KA7AGH.OR.USA.NA
R:931101/1156 23351@W0RLI.OR.USA.NA
R:931101/1128 7291@WA7SJM.WA.USA.NA
R:931101/0025 12848@WA7BHH.WA.USA.NA
R:931101/0000 35118@W7GCI.WA.USA.NA
R:931030/1514 47346@N8GTC.#CIN.IN.USA.NOAM
R:931030/0718 29215@W90J.IN.USA.NA
R:931030/0652 22073@N5CEC.IN.USA.NA
R:931030/0540 21727@KK9G.#CEIN.IN.USA.NA
R:931030/0537 35453@N5AAA.#CEIN.IN.USA.NA
R:931029/1256 26400@KD9LP.#NCIN.IN.USA.NA
R:931029/0636 15967@NU9H.#NWIN.IN.USA.NA
R:931028/1900 36038@WA8URE.#SWMI.MI.USA.NA

SB SAREX @ AMSAT \$STS-58.025
SAREX Keps & Update: 10/28

Thursday 10/28/93 @ 08:00 UTC

The last school group contact was completed yesterday. The Portsmouth HS in Portsmouth, New Hampshire had a telebridge contact using stations in California (Ralph Warner, N6MNN) and Texas (Bob Douglas, W5GEL). The students asked 5 questions during this bridge contact.

Hams across the U.S. and around the world continue to work the Shuttle Columbia on both voice and packet. Moreover, the completion of school group contacts has cleared several school backup passes for possible general QSO opportunities. While the SAREX Working Group cannot fully guarantee availability, there is a high probability that the STS-58 crew will be ready to take general calls over the continental U.S. on these passes. Two of these "scheduled" passes remain. These include orbit 178 at MET 11 days 1 hour 42 minutes (10/29 at 16:35 UTC) and orbit 192 at MET 11 days 22 hours and 29 minutes (10/30 at 13:22 UTC). Please note that the astronauts operated voice during yesterday's "scheduled" pass which occurred on 10/27 at 14:59 UTC (Orbit 145). Also note that hams on the ground heard or worked the Shuttle Columbia crew on several other orbits yesterday.

Element set GSFC-031, generated by Ron Parise, WA4SIR, is the official SAREX set for today. Please note that there is only a six second difference between element set GSFC-025 (released two days ago) and element set GSFC-031.

STS-58

1 22869U 93065A 93300.17699070 0.00133671 99048-5 24183-3 0 318
2 22869 39.0252 71.9896 0012817 34.2105 325.9529 16.00500857 1383

Satellite: STS-58

Catalog number: 22869

Epoch time: 93300.17699070 (27 OCT 93 04:14:51.** UTC)

Element set: GSFC-031

Inclination: 39.0252 deg

RA of node: 71.9896 deg Space Shuttle Flight STS-58

Eccentricity: 0.0012817 Keplerian Elements

Arg of perigee: 34.2105 deg

Mean anomaly: 325.9529 deg

Mean motion: 16.00500857 rev/day Semi-major Axis: 6651.1630 Km

Decay rate: 0.13E-02 rev/day*2 Apogee Alt: 281.30 Km

Epoch rev: 138 Perigee Alt: 264.25 Km

NOTE - This element set is based on NORAD element set # 031.

The spacecraft has been propagated to the next ascending node, and the orbit number has been adjusted to bring it into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Date: 6 Nov 93 22:50:59 GMT

From: news-mail-gateway@ucsd.edu

Subject: SAREX Keps & Update 10/28

To: info-hams@ucsd.edu

R:931103/1212Z @:WA7BHH.WA.USA.NA [Tacoma] #:13575 Z:98465 FBB5.15

R:931103/1132 6215@WB7QEU.WA.USA.NA

R:931103/1016 7983@WA7SJN.WA.USA.NA

R:931103/1003 1121@W0RLI.OR.USA.NOAM

R:931103/0545 37550@N7DXT.#EUGEN.OR.USA.NA

R:931103/0454 49935@WB7VMS.#MURPH.OR.USA.NOAM

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29047 ; Wed, 03 Nov 93 01:09:32 GMT

Date: Wed, 03 Nov 93 01:09:40 UTC

Message-Id: <29041_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29041 ; Tue, 02 Nov 93 21:42:27 GMT
Date: Tue, 02 Nov 93 21:42:59 UTC
Message-Id: <28985_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28985 ; Tue, 02 Nov 93 20:47:06 GMT
Date: Tue, 02 Nov 93 20:47:48 UTC
Message-Id: <28973_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28973 ; Tue, 02 Nov 93 19:58:01 GMT
Date: Tue, 02 Nov 93 19:58:49 UTC
Message-Id: <28968_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 28968 ; Tue, 02 Nov 93 18:43:20 GMT
Date: Tue, 02 Nov 93 18:44:09 UTC
Message-Id: <28942_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
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Date: Tue, 02 Nov 93 17:44:47 UTC
Message-Id: <28937_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHHB%W70EK@WD4ECK.AMPR.ORG>

id 28937 ; Tue, 02 Nov 93 15:43:49 GMT
Date: Tue, 02 Nov 93 15:44:50 UTC
Message-Id: <28936_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHHB%W70EK@WD4ECK.AMPR.ORG>

id 28936 ; Tue, 02 Nov 93 14:43:54 GMT
Date: Tue, 02 Nov 93 14:44:51 UTC
Message-Id: <28935_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHHB%W70EK@WD4ECK.AMPR.ORG>

id 28935 ; Tue, 02 Nov 93 13:43:53 GMT
Date: Tue, 02 Nov 93 13:44:50 UTC
Message-Id: <28933_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHHB%W70EK@WD4ECK.AMPR.ORG>

id 28933 ; Tue, 02 Nov 93 12:42:37 GMT
Date: Tue, 02 Nov 93 12:43:53 UTC
Message-Id: <28932_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W7OEK.AMPR.ORG with SMTP originator
<ABFHB%W7OEK@WD4ECK.AMPR.ORG>

id 28932 ; Tue, 02 Nov 93 12:09:45 GMT

X-Forwarded-To: W7OEK

Date: 28 Oct 93 19:00:00 UTC

Message-Id: <931028050312@w7oek.bbs>

From: abfhb@wa8ure.#swmi.mi.usa.na

To: ans@amsat.org

Subject: SAREX Keps & Update 10/28

X-BBS-Msg-Type: B

R:931102/0810z 28885@W7OEK.OR.USA.NA
R:931102/0121 49595@WB7VMS.#MURPH.OR.USA.NOAM
R:931101/1449 37097@N7DXT.#EUGEN.OR.USA.NA
R:931101/0530 4700@KB7DBD.OR.USA.NA
R:931101/1218 9138@KB7KBT.OR.USA.NA
R:931101/1152 6500@KA7AGH.OR.USA.NA
R:931101/1156 23351@W0RLI.OR.USA.NA
R:931101/1128 7291@WA7SJN.WA.USA.NA
R:931101/0025 12848@WA7BHH.WA.USA.NA
R:931101/0000 35118@W7GCI.WA.USA.NA
R:931030/1514 47346@N8GTC.#CIN.IN.USA.NOAM
R:931030/0718 29215@W90J.IN.USA.NA
R:931030/0652 22073@N5CEC.IN.USA.NA
R:931030/0540 21727@KK9G.#CEIN.IN.USA.NA
R:931030/0537 35453@N5AAA.#CEIN.IN.USA.NA
R:931029/1256 26400@KD9LP.#NCIN.IN.USA.NA
R:931029/0636 15967@NU9H.#NWIN.IN.USA.NA
R:931028/1900 36038@WA8URE.#SWMI.MI.USA.NA

SB SAREX @ AMSAT \$STS-58.025

SAREX Keps & Update: 10/28

Thursday 10/28/93 @ 08:00 UTC

The last school group contact was completed yesterday. The Portsmouth HS in Portsmouth, New Hampshire had a telebridge contact using stations in California (Ralph Warner, N6MNN) and Texas (Bob Douglas, W5GEL). The students asked 5 questions during this bridge contact.

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at MET 11 days 22 hours and 29 minutes (10/30 at 13:22 UTC). Please note that the astronauts operated voice during yesterday's "scheduled" pass which occurred on 10/27 at 14:59 UTC (Orbit 145). Also note that hams on the ground heard or worked the Shuttle Columbia crew on several other orbits yesterday.

Element set GSFC-031, generated by Ron Parise, WA4SIR, is the official SAREX set for today. Please note that there is only a six second difference between element set GSFC-025 (released two days ago) and element set GSFC-031.

STS-58

```
1 22869U 93065A   93300.17699070 0.00133671  99048-5  24183-3 0   318
2 22869   39.0252  71.9896 0012817  34.2105 325.9529 16.00500857 1383
```

Satellite: STS-58

Catalog number: 22869

Epoch time: 93300.17699070 (27 OCT 93 04:14:51.** UTC)

Element set: GSFC-031

Inclination: 39.0252 deg

RA of node: 71.9896 deg Space Shuttle Flight STS-58

Eccentricity: 0.0012817 Keplerian Elements

Arg of perigee: 34.2105 deg

Mean anomaly: 325.9529 deg

Mean motion: 16.00500857 rev/day Semi-major Axis: 6651.1630 Km

Decay rate: 0.13E-02 rev/day*2 Apogee Alt: 281.30 Km

Epoch rev: 138 Perigee Alt: 264.25 Km

NOTE - This element set is based on NORAD element set # 031.

The spacecraft has been propagated to the next ascending node, and the orbit number has been adjusted to bring it into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Date: 6 Nov 93 22:50:25 GMT

From: news-mail-gateway@ucsd.edu

Subject: SAREX Keps & Update 10/28

To: info-hams@ucsd.edu

R:931106/0810Z @:WA7BHH.WA.USA.NA [Tacoma] #:14200 Z:98465 FBB5.15

From: ABFHB@WA7BHH.WA.USA.NA

To : ANS@AMSAT.ORG

R:931105/1231 8627@WA7SJN.WA.USA.NA
R:931105/1207 1879@W0RLI.OR.USA.NOAM
R:931105/1012 38025@N7DXT.#EUGEN.OR.USA.NA
R:931105/0725 50349@WB7VMS.#MURPH.OR.USA.NOAM

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29255 ; Thu, 04 Nov 93 02:45:47 GMT
Date: Thu, 04 Nov 93 02:44:45 UTC
Message-Id: <29254_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29254 ; Thu, 04 Nov 93 01:45:29 GMT
Date: Thu, 04 Nov 93 01:44:47 UTC
Message-Id: <29253_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29253 ; Thu, 04 Nov 93 00:46:29 GMT
Date: Thu, 04 Nov 93 00:45:06 UTC
Message-Id: <29249_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29249 ; Thu, 04 Nov 93 00:15:42 GMT
Date: Thu, 04 Nov 93 00:15:11 UTC
Message-Id: <29228_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29228 ; Wed, 03 Nov 93 22:47:23 GMT

Date: Wed, 03 Nov 93 22:46:25 UTC
Message-Id: <29207_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29207 ; Wed, 03 Nov 93 21:45:05 GMT
Date: Wed, 03 Nov 93 21:44:35 UTC
Message-Id: <29164_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29164 ; Wed, 03 Nov 93 20:56:01 GMT
Date: Wed, 03 Nov 93 20:55:40 UTC
Message-Id: <29150_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29150 ; Wed, 03 Nov 93 18:45:47 GMT
Date: Wed, 03 Nov 93 18:45:40 UTC
Message-Id: <29148_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29148 ; Wed, 03 Nov 93 18:03:46 GMT
Date: Wed, 03 Nov 93 18:03:22 UTC
Message-Id: <29147_w7oek@w7oek.bbs>
From: abfhib%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator

<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29147 ; Wed, 03 Nov 93 17:12:03 GMT
Date: Wed, 03 Nov 93 17:11:44 UTC
Message-Id: <29136_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29136 ; Wed, 03 Nov 93 15:44:49 GMT
Date: Wed, 03 Nov 93 15:44:44 UTC
Message-Id: <29134_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29134 ; Wed, 03 Nov 93 14:45:08 GMT
Date: Wed, 03 Nov 93 14:44:47 UTC
Message-Id: <29132_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29132 ; Wed, 03 Nov 93 13:44:32 GMT
Date: Wed, 03 Nov 93 13:44:45 UTC
Message-Id: <29131_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>
id 29131 ; Wed, 03 Nov 93 12:44:39 GMT
Date: Wed, 03 Nov 93 12:44:44 UTC
Message-Id: <29126_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29126 ; Wed, 03 Nov 93 11:44:24 GMT
Date: Wed, 03 Nov 93 11:44:43 UTC
Message-Id: <29125_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29125 ; Wed, 03 Nov 93 10:44:31 GMT
Date: Wed, 03 Nov 93 10:44:47 UTC
Message-Id: <29117_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29117 ; Wed, 03 Nov 93 09:43:27 GMT
Date: Wed, 03 Nov 93 09:43:46 UTC
Message-Id: <29091_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29091 ; Wed, 03 Nov 93 08:56:04 GMT
Date: Wed, 03 Nov 93 08:55:59 UTC
Message-Id: <29080_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29080 ; Wed, 03 Nov 93 07:45:09 GMT
Date: Wed, 03 Nov 93 07:45:11 UTC
Message-Id: <29079_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29079 ; Wed, 03 Nov 93 07:03:53 GMT
Date: Wed, 03 Nov 93 07:03:31 UTC
Message-Id: <29066_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29066 ; Wed, 03 Nov 93 05:43:31 GMT
Date: Wed, 03 Nov 93 05:44:04 UTC
Message-Id: <29062_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHB%W70EK@WD4ECK.AMPR.ORG>

id 29062 ; Wed, 03 Nov 93 02:45:25 GMT
Date: Wed, 03 Nov 93 02:46:01 UTC
Message-Id: <29050_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: #LK90:W7GCI-9} Connected to AMSAT
047_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator

<ABFHB%W7OEK@WD4ECK.AMPR.ORG>

id 290#LK90:W7GCI-9} Connected to AMSAT
ge-Id: <28973_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W7OEK.AMPR.ORG with SMTP originator
<ABFHB%W7OEK@WD4ECK.AMPR.ORG>

id 28973 ; Tue, 02 Nov 93 19:58:01 GMT
Date: Tue, 02 Nov 93 19:58:49 UTC
Message-Id: <28968_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W7OEK.AMPR.ORG with SMTP originator
<ABFHB%W7OEK@WD4ECK.AMPR.ORG>

id 28968 ; Tue, 02 Nov 93 18:43:20 GMT
Date: Tue, 02 Nov 93 18:44:09 UTC
Message-Id: <28942_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W7OEK.AMPR.ORG with SMTP originator
<ABFHB%W7OEK@WD4ECK.AMPR.ORG>

id 28942 ; Tue, 02 Nov 93 17:43:53 GMT
Date: Tue, 02 Nov 93 17:44:47 UTC
Message-Id: <28937_w7oek@w7oek.bbs>
From: abfhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W7OEK.AMPR.ORG with SMTP originator
<ABFHB%W7OEK@WD4ECK.AMPR.ORG>

id 28937 ; Tue, 02 Nov 93 15:43:49 GMT
Date: Tue, 02 Nov 93 15:44:50 UTC
Message-Id: <28936_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHb%W70EK@WD4ECK.AMPR.ORG>

id 28936 ; Tue, 02 Nov 93 14:43:54 GMT
Date: Tue, 02 Nov 93 14:44:51 UTC
Message-Id: <28935_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHb%W70EK@WD4ECK.AMPR.ORG>

id 28935 ; Tue, 02 Nov 93 13:43:53 GMT
Date: Tue, 02 Nov 93 13:44:50 UTC
Message-Id: <28933_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHb%W70EK@WD4ECK.AMPR.ORG>

id 28933 ; Tue, 02 Nov 93 12:42:37 GMT
Date: Tue, 02 Nov 93 12:43:53 UTC
Message-Id: <28932_w7oek@w7oek.bbs>
From: abfhhb%w7oek@wd4eck.ampr.org
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

Received: from WD4ECK.AMPR.ORG by W70EK.AMPR.ORG with SMTP originator
<ABFHb%W70EK@WD4ECK.AMPR.ORG>

id 28932 ; Tue, 02 Nov 93 12:09:45 GMT
X-Forwarded-To: W70EK

Date: 28 Oct 93 19:00:00 UTC
Message-Id: <931028050312@w7oek.bbs>
From: abfhhb@wa8ure.#swmi.mi.usa.na
To: ans@amsat.org
Subject: SAREX Keps & Update 10/28
X-BBS-Msg-Type: B

R:931102/0810z 28885@W70EK.OR.USA.NA
R:931102/0121 49595@WB7VMS.#MURPH.OR.USA.NOAM
R:931101/1449 37097@N7DXT.#EUGEN.OR.USA.NA
R:931101/0530 4700@KB7DBD.OR.USA.NA
R:931101/1218 9138@KB7KBT.OR.USA.NA
R:931101/1152 6500@KA7AGH.OR.USA.NA
R:931101/1156 23351@W0RLI.OR.USA.NA

R:931101/1128 7291@WA7SJJ.WA.USA.NA
R:931101/0025 12848@WA7BHH.WA.USA.NA
R:931101/0000 35118@W7GCI.WA.USA.NA
R:931030/1514 47346@N8GTC.#CIN.IN.USA.NOAM
R:931030/0718 29215@W90J.IN.USA.NA

R:931030/0652 22073@N5CEC.IN.USA.NA
R:931030/0540 21727@KK9G.#CEIN.IN.USA.NA
R:931030/0537 35453@N5AAA.#CEIN.IN.USA.NA
R:931029/1256 26400@KD9LP.#NCIN.IN.USA.NA
R:931029/0636 15967@NU9H.#NWIN.IN.USA.NA
R:931028/1900 36038@WA8URE.#SWMI.MI.USA.NA

SB SAREX @ AMSAT \$STS-58.025
SAREX Keps & Update: 10/28

Thursday 10/28/93 @ 08:00 UTC

The last school group contact was completed yesterday. The Portsmouth HS in Portsmouth, New Hampshire had a telebridge contact using stations in California (Ralph Warner, N6MNN) and Texas (Bob Douglas, W5GEL). The students asked 5 questions during this bridge contact.

Hams across the U.S. and around the world continue to work the Shuttle Columbia on both voice and packet. Moreover, the completion of school group contacts has cleared several school backup passes for possible general QSO opportunities. While the SAREX Working Group cannot fully guarantee availability, there is a high probability that the STS-58 crew

will be ready to take general calls over the continental U.S. on these passes. Two of these "scheduled" passes remain. These include orbit 178 at MET 11 days 1 hour 42 minutes (10/29 at 16:35 UTC) and orbit 192 at MET 11 days 22 hours and 29 minutes (10/30 at 13:22 UTC). Please note that the astronauts operated voice during yesterday's "scheduled" pass which occurred on 10/27 at 14:59 UTC (Orbit 145). Also note that hams on

the ground heard or worked the Shuttle Columbia crew on several other orbits yesterday.

Element set GSFC-031, generated by Ron Parise, WA4SIR, is the official SAREX set for today. Please note that there is only a six second difference between element set GSFC-025 (released two days ago) and element set GSFC-031.

STS-58

```
1 22869U 93065A   93300.17699070 0.00133671 99048-5 24183-3 0   318
2 22869  39.0252  71.9896 0012817  34.2105 325.9529 16.00500857 1383
```

Satellite: STS-58

Catalog number: 22869

Epoch time:	93300.17699070	(27 OCT 93 04:14:51.** UTC)
Element set:	GSFC-031	
Inclination:	39.0252 deg	
RA of node:	71.9896 deg	Space Shuttle Flight STS-58
Eccentricity:	0.0012817	Keplerian Elements
Arg of perigee:	34.2105 deg	
Mean anomaly:	325.9529 deg	
Mean motion:	16.00500857 rev/day	Semi-major Axis: 6651.1630 Km
Decay rate:	0.13E-02 rev/day*2	Apogee Alt: 281.30 Km
Epoch rev:	138	Perigee Alt: 264.25 Km

NOTE - This element set is based on NORAD element set # 031.
The spacecraft has been propagated to the next ascending node, and the orbit number has been adjusted to bring it into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

Date: Fri, 5 Nov 1993 13:59:55 GMT
From: usc!cs.utexas.edu!utnut!nott!emr1!stephens@network.ucsd.edu
To: info-hams@ucsd.edu

References <CFzDws.Fpv@usenet.ucs.indiana.edu>,
<wb9omc.752453941@dynamo.ecn.purdue.edu>, <931104.82031.LMARRIN@delphi.com>
Subject : Re: 10m Mobile

LMARRIN@delphi.com writes:

>Dave, I would suggest you keep your 10 meter mobile gear, as there
>are at least two easy-to-work Russian satellites that can be heard on
>29 mhz. One uses 2 meter SSB/CW (RS-10) and the other uses 15 meter
>SSB/CW (RS-12.)
>
>Both probably pass over your QTH about 5 or 6 times a day, with
>passes ranging up to about 17 minutes in length.
>
>If the band is completely dead, and you're totally bored, listen on
>29.357 for the CW beacon of RS-10. Once you hear the beacon, start
>scanning between 29.360 and 29.400 for the live users. You may
>hear stations thousands of miles away.
>
>RS-12 is very similar; its beacon is on 29.408, with the transponder
>output between 29.410 and 29.450.
>
>I've worked RS-10 with just 10 watts of 2 meter SSB into a mobile
>mag-mount, and listened to the "downlink" on just a CB whip.
>
>73 from Leigh Marrin/KM6JE in Santa Barbara.
>
>(And a dirty little secret.... most of the current 10 meter mobile
>rigs can be easily expanded to cover CB and a little below. With
>the moronic mind-set of most CBers it may not be worth the trouble,
>however.)

Yes I have put my 10 m Radio Shack rig aside (HTX-100), but if you
want to use it for satellite work as a if or driver for a two meter
up link there is a problem. It only covers 28-29.7 MHz. So info on
how to extend its range, especially on rx to a full 2 MHz or perhaps
even wider would be appreciated. I have NO interest in CB. I agree
that it makes a great down link for the RS satellites, but it should
make a good if and driver for a transverter as well.

I post this so many times, once more will not make a difference.
For PC's, try PCT214.zip, Trak280.zip or Usat92b.zip on Oak.oakland.edu.
mirrors/msdos/satellite.
for 2 line elements archive.afit.af.mil pub/space

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Dave Stephenson
Geological Survey of Canada

Ottawa, Ontario, Canada
Internet: stephens@geod.emr.ca

Om Mani Padme Hum 1-2-3

End of Info-Hams Digest V93 #1316
